

### ***Amendments to the Claims***

The listing of claims will replace all prior versions, and listings of claims in the application.

1-82. (Cancelled)

83. (Newly added) A method of operating a peer-to-peer network with a first peer and a second peer, wherein the first peer is a super-peer, which is adapted to perform a co-operative role, comprising:

- a) the super-peer receiving notification that the co-operative role is requested;
- b) the super-peer establishing contact with the second peer; and
- c) providing co-operation between the first and second peers;

wherein the co-operative role is a holding role to store data for the benefit of the second peer, where the holding role includes the steps of the super-peer:

- d) receiving data;
- e) recording the received data as stored data;
- f) receiving requests for the stored data from users of the network or a process running on the network;

- g) retrieving the stored data based on the request; and
- h) transmitting the stored data to the requesting user or process;

wherein the stored data corresponds to links to other peers; and

wherein the links constitute a neural network having statistical attributes which indicate characteristics of the link.